In *Arctocephalus* the outer muscle is the same as in *Phoca;* the inner *arises* from the tendon of the tibialis posticus, which is attached to the outer side of the anterior end of the entocuneiform bone, and from the anterior outer half of the same, and is *inserted* as in *Phoca.*

The flexores breves in *Otaria* consist of one single and four double muscles; as also in *Trichechus* (Cunningham). While Professor Cunningham alludes to no differences in their insertions, Dr. Murie gives the insertion in *Otaria* of the first interosseus into the fascia covering the metacarpo-phalangeal joint of the hallux, which is very like what I have stated. Excluding *Phoca,* we agree as to some change in the tibial side of the 2nd metatarsal. Murie in *Otaria* derives the tibial head of the 2nd muscle from the proximal ends of the 1st and 2nd metacarpals. The smaller moiety of this muscle, that next the hallux, has also a partial origin or attachment to the superficial layer of the interosseous fibres and hallucial metacarpal. Professor Cunningham, in describing the flexor brevis indicis, gives the origin of the tibial head from the base of the 1st metatarsal. In my account of this digit in *Arctocephalus* I describe an adductor from the anterior tibial third of the 2nd metatarsal.

The Abductors.—In *Phoca vitulina* these are the abductor hallucis, the abductor minimi digiti, and the abductor tertius quinti digiti.

In *Arctocephalus* the abductor hallucis, the abductor minimi digiti, the abductor tertius quinti digiti, the abductor ossis metatarsi quinti, and the abductor ossis metatarsi primi are found. In *Macrorhinus* the abductor hallucis only is described.

The *Abductor hallucis* in *Otaria* is named the flexor brevis hallucis, in *Trichechus* (Murie) the abductor hallucis, and in *Trichechus* (Cunningham) the inner head of the flexor brevis hallucis. In *Phoca vitulina* it originates by three separate slips, which are close to each other and attached posteriorly. The outermost *arises* from the scaphoid bone upon the tendon of insertion of the tibialis posticus, a little to the outer side of the inner head of the flexor brevis hallucis, which lies at a greater depth in the sole, and from the adjacent posterior surface of the os calcis; the middle from the tendon of the tibialis posticus before it reaches the scaphoid just anterior to its insertion; the inner by a slip which comes from the outer posterior side of the sesamoid bone of the tibialis posticus tendon. These three slips unite a little posterior to the sesamoid bone, forming a strong tendon, which is inserted into the inner distal plantar side of the 1st metatarsal. On both sides of the slip which comes from the tibialis posticus tendon, and on the outermost side of the middle two-thirds of the outermost tendon, there are a few muscular fibres.

In *Macrorhinus* it *arises,* in common with the inner head of the flexor brevis hallucis, from the outer posterior half of the scaphoid bone upon the tendon of insertion of the tibialis posticus before it reaches the scaphoid. It is a strong fibrous band which is directed backwards; midway between its origin and insertion, it is joined on the outer side by the outer head, and the two together are *inserted* into the proximal tibial plantar surface of the 1st metatarsal.

In *Arctocephalus* it *arises* from the tubercle on the posterior end of the sesamoid bone of the tibialis posticus, and is closely united with its tendon. It courses backwards along the tibial side of the 1st metatarsal, and is *inserted* into the distal tibial side of the 1st metatarsal and the proximal end of its 1st phalanx, receiving some fibres from the tibialis posticus, which pass over the sesamoid bone into it. Its almost tendinous nature, its close association with the tendon of the posticus, and its arising from the sesamoid bone, show that it has a similar function to the posticus.

In *Otaria* Murie does not describe this muscle.